

Application No. 10/081,518

**REMARKS**

Favorable reconsideration and allowance of the subject application are respectfully requested. Claims 35-49 and 73-77 are pending in the present application, with claims 35, 48, 73, 76 and 77 being independent. Claims 1-34 and 50-72 have been canceled, claims 39-41 and 44-47 have been withdrawn, and claims 73-77 have been added by this amendment.

***Pending Claims***

The Examiner asserts in the Office Action Summary that claims 35-38, 42, 43, 48 and 49 are pending in the present application. Applicants respectfully submit that the non-identified claims have not been previously canceled and are thus also presently pending.

Applicants hereby cancel the previously withdrawn claims, except for claims 39-41 and 44-47, which remain pending in the present application and are subject to rejoinder upon allowance of independent claim 35, from which they each depend.

***Drawings***

Applicants respectfully request that the Examiner acknowledge whether or not the drawings that were filed on February 25, 2002 have been accepted (see item 10 of the Office Action Summary).

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***Specification***

The Examiner objected to the specification (see item 10 of the Office Action Summary), and states on page 2 of the Office Action that the lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors because it contains more than 20 pages. Applicants respectfully submit that the specification has been reviewed and no apparent errors have been identified.

Thus, withdrawal of the objection to the specification is respectfully requested.

***Information Disclosure Statement***

Information Disclosure Statements and accompanying PTO-1449 Form were filed on February 25, 2002 and January 10, 2003. There is presently no indication that the Examiner considered the documents identified in the Information Disclosure Statement that was filed on February 25, 2002 (copy attached).

Accordingly, the Examiner is respectfully requested to acknowledge consideration of the documents identified in that Information Disclosure Statement by initialing the PTO-1449 Form and returning a copy of the initialed form to the undersigned.

***Claim Rejections***

The Examiner rejected: claims 35-37, 42-43, and 48-49 under 35

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U.S.C. §102(e) as being anticipated by Goetz et al. (US 6,097,183); and claim 38 under 35 U.S.C. §103(a) as being unpatentable over Goetz et al. in view of Eguchi et al. (US 4,392,375). These rejections are respectfully traversed insofar as they pertain to the presently pending claims.

Independent claims 35 and 48 are generally directed to a rotational angle detecting device that includes detecting means for detecting a position of a target and outputting a detection signal according to the detected position.

In rejecting independent claims 35 and 48, the Examiner alleges that Goetz et al. anticipates each of the features of independent claims 35 and 48. Applicants, however, respectfully disagree for at least the following reasons.

Goetz et al. is directed to a position detection apparatus that corrects for non-linear sensor regions. More specifically, the apparatus of Goetz et al. determines the position of a magnet relative to a first and second transducer. A ratio is then calculated by dividing the amplitudes of the output signal values and a correction factor is then applied to this ratio. In order to apply these correction factors, Goetz et al. first determines which region of a sinusoidal function corresponds to the particular ratio value. Once this region is determined, the ratio value is used to select an appropriate correction factor from a lookup table, see column 8, lines 38-42.

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Goetz et al., however, fails to teach or suggest at least the feature of "means for detecting a maximum value and a minimum value of the detection signal multiplied by said gain," as recited in independent claims 35 and 48.

5 In fact, Goetz et al. contains absolutely no teaching that a maximum value and a minimum value is detected. Goetz et al. merely teaches, with reference to, for example, Figs. 9a or 9b, that the output signal value "A" 94 and "B" 96 are detected and that a ratio between amplitudes is calculated. Goetz et al., however, as stated  
10 above, provides absolutely no teaching that a maximum and minimum value of either the output signals 90 or 92 are detected and that a difference, or an average value, between these maximum and minimum values is then calculated. Thus, Goetz et al. does not anticipate independent claims 35 or 48.

15 Furthermore, Applicants note that Goetz teaches a processing of output signals of two sensors (transducers), whereas the present invention teaches a processing of maximum and minimum values of each (single) output signal of each sensor, despite the Examiner's comments in the Office Action. In addition, with respect to the  
20 Examiner's comments regarding claim 48, specifically, to the "average value," Applicants respectfully submit that Goetz obviously uses an average value  $[(A + B)/2]$  of output signals of two sensors (transducers), whereas the present invention uses an average value of maximum and minimum values of an output signal of

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a single sensor. Thus, as noted above, Goetz clearly does not anticipate the claims.

Dependent claims 36-47, and 49 should be considered allowable at least for depending from an allowable base claim.

Accordingly, withdrawal of the rejection is respectfully requested.

New claims 73-77 should be considered allowable at least because the cited art fails to teach or suggest the combination of elements including at least that a maximum value and a minimum value of the detection signal is detected.

#### **Conclusion**

In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Martin R. Geissler (Reg. No. 51,011) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

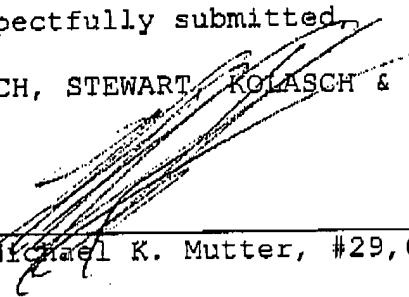
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: PTO-1449 Form